PALM BEACH COUNTY BOARD OF COUNTY COMMISSIONERS

AGENDA ITEM SUMMARY

Meeting Date:

December 21, 2021

Consent [X]

Public Hearing []

Regular []

Department:

Water Utilities Department

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to approve: Consultant Services Authorization (CSA) No. 5 to the Consulting/Professional Services Utility Distribution & Collection System Engineering Services Contract (Contract) with Keshavarz & Associates, Inc. (Consultant) for the Lake Worth Hills Water Main Replacement (Project) for a not to exceed amount of \$389,811.59.

Summary: On December 15, 2020, the Board of County Commissioners approved the Palm Beach County Water Utilities Department (PBCWUD) Contract (R2020-1898) with Consultant. CSA No. 5 provides for professional engineering services relating to design and permitting of the Project. These services include subsurface utility exploration, geotechnical exploration, survey, construction plans, permitting, and outreach support and bid support services for the replacement of approximately 10,600 linear feet of 2-inch, 4-inch, and 6-inch asbestos cement water main and appurtenances within the Lake Worth Hills residential community located in Greenacres.

This Contract was procured under the requirements of the Equal Business Opportunity Ordinance. On October 2, 2019, the Goal Setting Committee applied an Affirmative Procurement Initiative (API) of a minimum mandatory 20% Small Business Enterprise (SBE) subcontracting goal and an evaluation preference for up to 15 points based upon the relative level of dollar participation by certified SBE firms. The Contract provides for 85.00% SBE participation, which includes 85.00% MBE participation, 82.00% MBE (A), and 3.00% MBE (B). CSA No. 5 includes 87.17% SBE participation, which includes 87.17% MBE participation, 87.17% MBE (A), and 0.00% MBE (B). The cumulative SBE participation including CSA No. 5 is 86.70% SBE, which includes 86.70% MBE participation, 86.70% MBE (A), and 0.00% MBE (B). Consultant is a Palm Beach County based company. This project is included in the PBCWUD FY22 budget. (PBCWUD Project No. 21-084) District 2 (MJ)

Background and Justification: The existing water mains to be replaced under the Project are substandard asbestos cement pipes that are undersized and lack adequate fire protection. The Project is needed to increase fire protection, restore the service life, efficiency and effectiveness of the water distribution system within Lake Worth Hills. The Project will also help to reduce the operation and maintenance workload and associated cost.

Attachments:

- 1. Two (2) Originals of Consultant Services Authorization No. 5
- 2. Location Map
- 3. Certificate of Liability Insurance

Recommended By:	AL: 13 ayest	11/23/41	
·	Department Director	Date	
Approved By:	Lel & Dur	11/8/2021	
	Assistant County Administrator	Date	

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

A. Five rear Summary of Fiscal Impact:											
Fiscal Years	2022	2023	2024	2025	2026						
Capital Expenditures Operating Costs External Revenues Program Income (County) In-Kind Match County	\$389,812 <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u>	<u>O</u>	0 0 0 0	0 0 0 0	<u>0</u> 0 0 0						
NET FISCAL IMPACŢ	<u>\$389,812</u>	<u>0</u>	<u>0</u>	<u>0</u>							
# ADDITIONAL FTE POSITIONS (Cumulative)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>						
Budget Account No.: Fu	ınd <u>4011</u> [Dept <u>721</u>	Unit W031	Object <u>654</u>	<u>3</u>						
Is Item Included in Current Budget? Yes X No											
Does this item include the us	se of federal fur	nds?	Yes	No X							
	Re	porting Cate	egory <u>N/A</u>								
B. Recommended Sour	ces of Funds/	Summary c	of Fiscal Impa	ct:							
One (1) time expendit	One (1) time expenditure from user fees, connection fees and balance brought forward.										
C. Department Fiscal R	eview:	Lu L.	A fen	rm							
	III. <u>REVI</u>	EW COMME	ENTS								
A. OFMB Fiscal and/or	Contract Deve	elopment aı	nd Control Co	mments:							
A. OFMB Fiscal and/or Contract Development and Control Comments: 1											
Assistant Cour C. Other Department R		11-1									

This summary is not to be used as a basis for payment.

Department Director

Palm Beach County Water Utilities Department Contract for Consulting/Professional Services Utility Distribution & Collection System Engineering Services Resolution No. R2020-1898 Contract Dated December 15, 2020

Proje	ect Title: Lake Worth Hills Water Main Replacement
PBC	WUD Project No.: 21-084
Cons	sultant: Keshavarz & Associates, Inc.
Addr	ress: 711 North Dixie Highway, Suite 201, West Palm Beach, FL 33401
Budg	get Line Item No. <u>4011-721-W006-6543</u>
Distr	rict No.: 2
limite meet perm wate	Consultant Services Authorization provides for: engineering services, including but noted to, subsurface utility engineering (SUE), geotechnical exploration, community outreacing attendance and support, survey, preparation of construction plans and details itting, and construction contract assistance services towards the replacement of existing mains and services throughout the Lake Worth Hills community within the City on the contract assistance.
	(See ATTACHMENT A for detailed scope of services)
partic includ (B), Auth MBE	
1.	Services completed by the Consultant to date :
	See ATTACHMENT B.
2.	Consultant shall begin work upon receipt of Notice to Proceed correspondence.
3.	The compensation to be paid to the Consultant for providing the requested services shall be:
	A. Computation of time charges plus expenses, not to exceed \$ 389,811.59
	B. Fixed price of \$
	C. Total \$ 389,811.59
4.	This Authorization may be terminated by the County without cause or prior notice. In the event of termination not the fault of the Consultant, the Consultant shall be compensated for all services performed through the date of termination, together with reimbursable expenses (if applicable) then due.

Palm Beach County Water Utilities Department
Contract for Consulting/Professional Services
Utility Distribution & Collection System Engineering Services
Resolution No. R2020-1898 Contract Dated December 15, 2020

Project Title:	Lake Worth Hills Water Main Replacement
PBCWUD Pro	oject No.: <u>21-084</u>

- 5. SBE participation is included in **ATTACHMENT C** under this Authorization. The attached Schedule 1 defines the SBE applied to this Authorization and Schedule 2 establishes the SBE contribution from each sub-consultant (Letter of Intent).
- 6. This Authorization does not amend, change, or modify the Contract dated December 15, 2020 which remains in full force and effect.
- 7. All Attachments to this Authorization are incorporated herein and made a part of this Consultant Services Authorization.

Palm Beach County Water Utilities Department
Contract for Consulting/Professional Services
Utility Distribution & Collection System Engineering Services
Resolution No. R2020-1898 Contract Dated December 15, 2020

Project Title: Lake Worth Hills Water Main Replace	cement
PBCWUD Project No.: 21-084	
IN WITNESS WHEREOF, this Authorization is a obligations of the aforementioned Contract.	ccepted, subject to the terms, conditions and
PALM BEACH COUNTY, A POLITICAL SUBDIVIS	SION OF THE STATE OF FLORIDA
Joseph Abruzzo, Clerk of the Circuit Court & Comptroller, Palm Beach County	Palm Beach County, Board of County Commissioners
ATTEST:	
Signed:	Signed: Robert S. Weinroth, Mayor
Typed Name: Deputy Clerk	A13 (Date)
Approved as to Form and Legal Sufficiency	CONSULTANT: Keshavarz & Associates, Inc.
Signed:	(Signature)
Typed Name: Michael W. Jones County Attorney	Mark A Williams, PE, Senior Vice President (Name and Title) 10/28/2021
	(Date)
STATE OF FLORIDA	
COUNTY OF PALM BEACH	
The foregoing instrument was acknowledged before	e me by means of ☑ physical presence or ☐ online
notarization, this 28 day of October, Zoz	, by Mark A. Williams, P.E. who is personally
known to me or ☐ has produced	as identification.
DEBORAH L. FULGENZI Notary Public – State of Florida Commission # GG 175704 My Comm. Expires Jan 28. 2022 Bonded :hrough National Notary Asso. British Typ	(Signature of Notary Public - State of Florida) Deborah L. Fulgenzi Dee, or Stamp Commissioned Name of Notary Public)

Palm Beach County Water Utilities Department
Contract for Consulting/Professional Services
Utility Distribution & Collection System Engineering Services
Resolution No. R2020-1898 Contract Dated December 15, 2020

LIST OF ATTACHMENTS

ATTACHMENT A Scope of Services

ATTACHMENT B Summary and Status of Consultant Services Authorizations

ATTACHMENT C OEBO Schedules 1 and 2

ATTACHMENT D Project Schedule

ATTACHMENT E Budget Summary

ATTACHMENT F Summary of SBE-M/WBE Business Tracking

ATTACHMENT G Location Map

ATTACHMENT A

SCOPE OF SERVICES

PBCWUD Project No.: 21-084

Project Title: Lake Worth Hills Water Main Replacement

CONSULTANT shall perform:

BACKGROUND:

The Palm Beach County Water Utilities Department (PBCWUD) has identified segments of existing potable water mains for replacement throughout the Lake Worth Hills community within the City of Greenacres (City).

The project area is bounded by Biscayne Drive to the north, South 38th Court to the south, South 57th Avenue to the west, and South 55th Avenue to the east. Currently, a segment of water main and service replacements are being constructed and installed within this boundary under PBCWUD Project No. 21-056, South 37th Street Water Main Replacement. Completed improvements from the PBCWUD No. 21-056 project will be incorporated into the project's replacement design.

This project is focused on replacing aged, undersized, and asbestos cement water mains. All affected existing water services shall be replaced and additional fire protection coverage will be included where necessary throughout the project area.

SCOPE OF SERVICES:

Under this Consultant Services Authorization (CSA), Keshavarz & Associates, Inc. (CONSULTANT) shall provide the services necessary to construct the water main replacements in accordance with PBCWUD's Minimum Engineering and Construction Standards, and applicable permitting agency regulations. Such services include project management, surveying, subsurface utility engineering (SUE), geotechnical exploration, public engagement assistance and meeting attendance, design, permitting, and construction contract award assistance.

The services provided under this CSA are related to approximately 10,600 linear feet (LF) of potable water infrastructure improvements as summarized by the following:

- 10,300 LF of existing water mains to be removed and/or replaced.
- 300 LF of new water mains.
- Replacement of existing water services currently serving a total of 217 PBCWUD customers.
- Replacement of affected existing fire hydrants and the addition of approximately twenty-six (26) new fire hydrants.

The following services will be provided by the CONSULTANT:

Task 1. Preliminary Design and Consulting Services

1.1. Project Management, Research, Data Exchange, Project Orientation, and Kick-off:

The CONSULTANT shall actively manage its sub-consultants towards the proper and successful execution of PBCWUD's objectives in the context of the project scope. CONSULTANT's project management responsibilities range from internal to external methods and approaches affecting the general advancement of the project. Included in this task are the CONSULTANT's continual quality assurance and control efforts performed by the senior project manager and project director/principal as the work progresses.

The CONSULTANT shall conduct a project kick-off meeting with PBCWUD. The CONSULTANT shall chair this kick-off meeting, generate agendas, and provide meeting summaries for same.

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The CONSULTANT shall research, review, and study record geographic information system (GIS) database information, and other pertinent information of the existing facilities within the road right-of-way (R/W).

This task includes general correspondence, coordination and data exchange with PBCWUD, including PBCWUD Operations & Maintenance (O&M), as needed throughout the project.

This task also includes efforts required to compile reports, tables, receipts, backup records and to comply with applicable accounting and Small/Minority Business Enterprise (S/MBE) requirements.

1.2. Preliminary Meetings and Coordination with Regulatory Agencies and Right-of-Way Owners:

The CONSULTANT shall coordinate, and if necessary, attend meetings with the representatives of the affected R/W owners and/or regulatory agencies in order to present the general project intent, project areas, and anticipated design timeline.

The CONSULTANT shall preliminarily discuss relevant permitting conditions, constraints, and considerations related to installing water mains within the City's R/W. In addition, details of the permit application process and timelines for application reviews will be confirmed with the respective regulatory agency or R/W owner.

The CONSULTANT shall also specifically coordinate with the City in relation to any anticipated improvement projects that may coincide or conflict with this project, including the City's ongoing sidewalk projects. The CONSULTANT shall discuss and explore any cost-sharing or schedule adjustment possibilities between PBCWUD and the City's anticipated or desired projects by means of interlocal collaboration.

The CONSULTANT is not responsible for changes to the regulatory process and construction standards of the governing agencies during the subsequent design and permitting phases of this project. These changes may cause delays in the anticipated permit application review and approval phases of the project.

1.3. Field Visit(s) and Coordination with O&M Staff:

The CONSULTANT shall perform one (1) field visit to review the project's existing conditions and to identify possible conflicts or constraints visible and/or identifiable through a field visit. The CONSULTANT shall photograph and document these existing conditions for their use during design and coordination. These photographs shall be provided to PBCWUD as a part of the 100% Final Design stage deliverable.

The CONSULTANT shall also contact O&M to solicit any insight on the existing affected infrastructure. The CONSULTANT shall perform one (1) field visit with O&M staff, if necessary, related to this solicitation for input or to review any additional concerns that arise during this project's duration.

This task also includes the CONSULTANT performing any other necessary exhibit creation efforts and direct coordination with PBCWUD in soliciting input from O&M field crews, Inflow & Infiltration (I&I) teams, and PBCWUD customer service staff.

1.4. Utility Coordination:

The CONSULTANT shall identify all pertinent dry utility providers (electric, gas, phone, cable television, traffic signal systems, etc.) within the project area by means of contacting "Sunshine 811." The CONSULTANT shall then prepare exhibits and distribute requests for existing facility locations/data and proposed improvements to these dry utility providers. The CONSULTANT shall coordinate and track the responses from the utility providers and incorporate this information into the construction plans in an attempt to minimize unidentified potential conflicts during the construction of the proposed improvements.

This effort is intended to be preliminary in nature and will require additional verification via various methods, as is typical of utility retrofit design practices.

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1.5. Preliminary Design Stage:

The CONSULTANT shall create preliminary design drawings based on GIS data depicting the existing water system facilities, the proposed water main sizes and general alignments/locations, fire hydrant locations, water main deactivation locations, and approximate limits of existing water main abandonment in-place and abandonment via grouting in-place. These GIS-based exhibits will be submitted to PBCWUD as preliminary design drawings and shall be in place of the standard 30% design submittal.

These preliminary design drawings will be used in discussion with PBCWUD to determine/finalize aspects of the overall design, as well as specific, unique design considerations prior to the actual design process being fully underway.

These preliminary design drawings are not anticipated to reflect all acquired topographic survey data or to reflect the calculated limits of the R/W, property lines, or existing encumbrances. At the time of preliminary design submittal, the CONSULTANT may choose to reflect the in-progress results of Route Surveying (see Task 2.3) and/or Topographic Surveying (see Task 2.4) services in a clear manner within limited areas to aid in preliminary design discussions with PBCWUD.

Task 2. Infrastructure Surveying and Design Services:

The CONSULTANT shall engage in all necessary field efforts with sub-consultants, perform survey services, prepare and submit 60%, 90%, and 100% Final Design drawings to PBCWUD towards the replacement of the existing water main within the prioritized project area.

This CSA assumes:

- Of the two (2) existing parallel water mains along a portion of South 57th Avenue, the CONSULTANT is to only replace the eastern existing water main; the western existing water main is to remain.
- The proposed replacement water mains will be installed via open-cut installation method at the four (4) existing culvert canal crossings on South 57th Avenue and South 55th Avenue.
- Aerial canal crossings, horizontal directional drill, or other sub-aqueous canal crossings are not included in this CSA.
- The proposed infrastructure replacement design will be depicted in plan view only.
- Proposed water main replacements are to consider any future improvement projects by the City where information is available to be utilized during design.
- The CONSULTANT is to review the condition and locations of the existing water meter boxes and recommend replacement with Tier 15 traffic-rated meter boxes and/or lids if deemed necessary.
- The consolidated review comments generated by PBCWUD shall be provided to the CONSULTANT for the 60% and 90% design stage submittals within two (2) weeks of the CONSULTANT's submittal in order to maintain the schedule of deliverables requested by PBCWUD.
- As-built record drawings will be provided to the CONSULTANT by PBCWUD prior to the 60% design stage deliverable once construction of PBCWUD Project No. 21-056 South 37th Street Water Main Replacement is complete.
- No private potable water services are intended to be replaced.
- No construction phasing of the proposed improvements. If construction phasing is required upon PBCWUD's preliminary coordination with its Continuing Construction Pipeline Contractor, modification of the construction plans to reflect construction phasing will be included in a supplement to this CSA upon request and approval by PBCWUD.

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- No sanitary infrastructure improvements or replacements are included.
- Hydraulic modeling for pipe sizing adjustments, fire flow analysis, or for permitting purposes is not included in this CSA.
- Assistance towards acquiring any utility easements or private property temporary construction authorizations is assumed to be unnecessary, thus these services are not included in this CSA.

2.1 Coordination with Subsurface Utility Engineering (SUE) and Geotechnical Engineering Sub-Consultants for Field Investigations:

The CONSULTANT shall coordinate with the SUE sub-consultant, InfraMap Corp. (InfraMap) and the geotechnical exploration sub-consultant, Tierra South Florida, Inc. (Tierra) on a continual basis to schedule their respective services in a timely manner.

The CONSULTANT shall prepare and provide utility targeting (scanning) and test hole (soft dig) exhibits to InfraMap to request the required work. InfraMap shall scan the limits of the proposed utility replacement corridors and designated road R/W using ground-penetrating radar (GPR) and other methods as indicated in their proposal.

Further in the design phase, additional information will be needed for specific utilities to confirm condition, material, and location, acquire vertical elevations, confirm tie-in locations, navigate critical crossings, etc. The CONSULTANT shall prepare exhibits to provide to InfraMap depicting the location of the areas needing additional information for design purposes, whether via scanning or soft digs.

Further, the CONSULTANT shall coordinate with Tierra to perform Standard Penetration Test (SPT) soil borings at locations determined by Tierra based on their assessment of the proposed utility replacement corridor's existing conditions and geotechnical characteristics.

The CONSULTANT shall provide both InfraMap and Tierra with all available system information assembled in coordination with PBCWUD and utility providers at the time of the requested SUE and geotechnical activities. InfraMap and Tierra shall be individually responsible for performing all necessary activities prior to performing their respective work such as, but not limited to, calling "Sunshine 811."

Submittal of necessary applications for sub-consultant's work within the various R/Ws will be performed by the sub-consultants (see sub-consultant proposals included in Attachment E).

2.2 Field Acquisition of SUE Efforts and Depiction of Results on Construction Plans:

The CONSULTANT's survey field crews shall locate the results of the scanning efforts on the part of InfraMap within the limits of the road R/W. These field surveyed results shall be incorporated into the construction plans.

The CONSULTANT shall locate each soft dig and shall depict the location and vertical elevation data of the utility on the construction plans. A spreadsheet-based soft dig inventory containing the results of all soft digs associated with the project will be compiled and included with the construction plans. All SUE results will be provided to PBCWUD in the Final Design stage deliverable.

2.3 Route Survey:

The horizontal survey data will be in the State Plane Coordinate System of North American Datum of 1983, 2007 adjustment (SPCS NAD/83-2007). The vertical datum shall be in the North American Vertical Datum of 1988 (NAVD88) to include a conversion factor to convert the vertical datum to the National Geodetic Vertical Datum of 1929 (NGVD29), unless PBCWUD stipulates otherwise, and shall be used as the basis of design.

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Included in this CSA as a part of this task:

- Field locate and occupy one (1) published Palm Beach County Vertical Benchmark nearest to the project area.
- Establish field control within an acceptable tolerance of accuracy by performing a bench loop and utilizing global positioning system (GPS) horizontal and vertical data calculation averaging.
- A baseline created along the proposed water main replacement route for plan sheet stationing.
- Calculation and depiction of R/W lines, property lines, and existing easements in State Plane Coordinate System based on recorded plats, R/W maps, deeds publicly available, and/or title search results, where confirmed to be necessary.
- Develop horizontal control plan sheets depicting established control, construction benchmarks, and baseline stationing.
- Establish sixteen (16) benchmarks for construction purposes shown on the construction plans.

The following is not included in this task or this CSA:

- Coordination and drafting sketches and legal descriptions for any proposed utility easements.
- Coordination for title searches and the subsequent review and drafting of the title search results.

2.4 Topographic Survey:

Topographic survey data acquisition shall be performed within the approximately 10,600 LF of proposed water main replacement corridor.

Field located and depicted topographic data shall include:

- All existing water valves, fire hydrants, water meters, backflow preventers, double detector check valves, sanitary manholes, sanitary cleanouts, storm manholes, catch basins within and adjacent to the project area if deemed necessary by the CONSULTANT.
- Location and identification of pavement edges, driveways, and turnouts, sidewalks, trees, signs, power poles, guy wire anchors, light poles, aboveground utility boxes, etc., within the proposed corridors.
- If accessible and identifiable, pipe sizes, material, and inverts of stormwater and sanitary sewer facilities located within or adjacent to the project area shall be acquired by means of accessing existing stormwater and sanitary structures.
- Existing vertical grades within the proposed water main replacement corridor at a maximum of one hundred (100) feet intervals perpendicular to the centerline of the R/W corridor, extending to approximately ten (10) feet beyond the project area as deemed necessary by the CONSULTANT.
- Available information on existing potable water and sanitary sewer systems (where applicable)
 will be provided by PBCWUD in the form of project record drawings for field verification, as
 applicable and if possible, during topographic data acquisition efforts.
- Dry utility facility locations will be acquired where paint markings, as established by others, are encountered during topographic data acquisition efforts and will also be included on the construction plans.

This task assumes the following:

 No heavy or dense vegetation will need to be cleared or cut to acquire topographic survey data along the corridor.

2.5 60% Design Stage:

The CONSULTANT shall prepare construction plans on 24"x36" plan sheets at a 1:20 scale depicting the proposed water main replacement design at a completion level of approximately 60%. These 60% design stage construction plans shall be submitted to PBCWUD for review.

The 60% design plans shall be based upon the preliminary design as modified according to all discussions with PBCWUD and input from regulatory agencies up to this stage. The 60% design plans shall depict the existing utility replacement/abandonment limits in detail, as well as the various proposed infrastructure replacement corridors in detailed and dimensioned plan views. These design plans shall also include the proposed connections to the existing water mains that are to remain.

These plans shall include all existing utilities as acquired during the survey acquisition phase, the results of the utility coordination, and shall include any record information of the existing water and wastewater facilities as provided by PBCWUD. The results of SUE scanning will also be depicted on the plans. Conflicts, crossings, and deflections will be identified on the plans to the best of the CONSULTANT's abilities based on available data to date. A preliminary pothole inventory sheet will also be included reflecting known soft dig data at the time of the submittal. The 60% submittal will also include proposed grading and restoration details, PBCWUD Standard Details, and CONSULTANT's general details and general notes.

2.6 90% Design Stage:

Construction plans at a completion level of approximately 90% shall be submitted to PBCWUD. The 90% design plans shall include the 60% design as modified through PBCWUD's issued review comments and other data as deemed relevant by CONSULTANT. Results of SUE soft digs will be depicted on the plans; known or discovered conflicts shall be calculated and detailed; deflections will be detailed; and crossings calculated.

The 90% submittal includes all necessary plan sheets, details, and notes for permitting purposes.

2.7 100% Final Design Stage:

Final construction plans will be prepared and shall include any modification from PBCWUD and/or modification requested by other regulatory agencies and approved by PBCWUD.

2.8 Preparation of Engineer's Opinion of Probable Construction Cost:

Upon completion of the 60% and 90% design stage submittals, the CONSULTANT shall prepare an Engineer's Opinion of Probable Construction Costs (OPCC) based upon the designated PBCWUD Pipeline Continuing Construction Contract that will apply to the construction of the subject improvements. The CONSULTANT shall submit this OPCC to PBCWUD within one (1) week of the 60% and 90% design stage submittals. The OPCC will be updated to include any modifications during the final phases of the design and will be resubmitted with the 100% Final design stage.

Task 3. <u>Permitting Services with Regulatory Agencies for Proposed Infrastructure Improvements</u>

Upon receipt of the 90% design stage review comments, the CONSULTANT shall prepare applications for plan review/permit approvals from the following agencies:

- City of Greenacres R/W Permit
- City of Greenacres Fire Department Review
- Florida Department of Health in Palm Beach County General Permit for Potable Water Use

The CONSULTANT's services during the permitting phase shall include the following, as needed:

 Attend pre-application meetings with the staff of each regulatory agency as required beyond the preliminary meetings.

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- Attend meetings with each of the regulatory agencies during the review of the final permit applications as required.
- Track and monitor the permitting process, as well as assist PBCWUD in consultations with the appropriate authorities as necessary.
- Respond to request(s) for additional information from each regulatory agency.
- Produce and distribute permitting status sheets at milestones or more frequently if requested by PBCWUD. The permitting status sheet will include the permit number, regulatory contact, a permit expiration date, as well as a timeline of when applications, comments, and responses are submitted or approved.
- Provide PBCWUD with one (1) set of approved permits and plans from each permitting agency in hard and electronic copies, as may be applicable.
- Request permit extensions from regulatory agencies as needed throughout the duration of the project leading up to the commencement of construction.
- Associated permit application fees shall be determined by the regulatory agencies in coordination with the CONSULTANT and will be paid by PBCWUD.

Task 4. Construction Contract Award Assistance:

It is our understanding that PBCWUD is planning to assign the construction of this project to one of its continuing pipeline construction contractors. The CONSULTANT will assist PBCWUD with the development of the bid items and award phase with the chosen construction contractor. These services include meeting with the contractor to review the project scope, reviewing and commenting on the construction contractor's draft and revised work authorization, as well as responding to written requests for additional information.

Task 5. <u>Assistance Towards Public Engagement:</u> (With PBCWUD Public Outreach Consultant)

The CONSULTANT shall assist the PBCWUD public outreach consultant's efforts to inform the property owners that are affected by this project's improvements. The CONSULTANT shall prepare exhibits to be provided to PBCWUD's public outreach consultant for distribution to the property owners regarding the project's general timeline leading up to and at the onset of construction, as well as the general impacts that property owners can expect during the construction of the necessary improvements within the various project areas. The CONSULTANT shall review and comment on all related documents prepared by PBCWUD's public outreach consultant to submit to the property owners, and shall make every reasonable attempt to assist the PBCWUD public outreach consultant's efforts to provide informed answers to affected property owners' written or spoken questions.

All utilized public outreach exhibits produced by the CONSULTANT shall be included in the final design stage deliverable as requested by PBCWUD staff.

CONSULTANT's attendance at in-person meetings is not included in this task.

- Task 6. Permitting and Notification Coordination for Sub-consultant Efforts:

Should the City require a R/W permit or Maintenance-of-Traffic (MOT) application be submitted for the work by the SUE or Geotechnical sub-consultants within the R/W, the CONSULTANT and sub-consultants shall coordinate with the appropriate individuals and/or departments so the sub-consultant can submit the required applications.

The sub-consultant shall submit, track the application review and approval progress, and respond to requests for additional information, which is assumed to be provided by the sub-consultants. This assumes the sub-consultants will provide all necessary accompanying information for the subject application submittal and review process.

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Under this task, the CONSULTANT shall also notify representatives of the City via call or writing of the approximate scheduling for Geotechnical and SUE field activities. The CONSULTANT shall not be responsible for the preparation or submittal of signed and sealed MOT plans if required for any R/W permit related to Geotechnical or SUE work.

Task 7. Subsurface Utility Engineering (InfraMap Corp.): (Proposal included in Attachment "E")

InfraMap shall scan the limits of specific strategic areas within the project limits using GPR and other methods, as described in their proposal, to identify the approximate horizontal location of wet and dry utilities. Utilities located will be painted or flagged in the field for acquisition by the CONSULTANT's survey crew. The results of the targeting/scanning will be provided in the form of color-coded sketches identifying the various utilities detected in approximate location trends and configurations. Up to four and one-half (4.5) days of scanning is included in this CSA. InfraMap's proposal also includes mileage direct expenses, and as needed administrative fees to perform this scanning.

InfraMap shall perform soft digs to provide subsurface information at each of the designated locations and will provide exhibits of the results for each soft dig. Up to fifty (50) soft digs to a depth of six (6) feet are included with this CSA.

InfraMap's proposal also includes mileage, direct expenses, and fees for traffic control flagging as supplemental fees to be billed as direct expenses should they be required to perform the above referenced soft digs. Implementation and maintenance of necessary maintenance of traffic (MOT) measures are covered under InfraMap's proposal. If the requested utilities are deeper than six (6) feet, InfraMap's proposal includes a contingent as needed fee per feet beyond the included six (6) feet deep soft digs. Should an application of some fashion be required for SUE work within a particular R/W, InfraMap will prepare and submit the applications for approval by the R/W owner.

Task 8. <u>Geotechnical Exploration (Tierra South Florida, Inc.);</u> (*Proposal included in Attachment "E"*)

Included in this CSA, Tierra will perform eight (8) Standard Penetration Test (SPT) borings, each to a depth of six (6) feet below the surface, eight (8) SPT borings, each to a depth of ten (10) feet below the surface, ten (10) asphalt cores, as well as the aggregate analysis and laboratory organic content tests on the recovered SPT bore samples as is typical to produce a report of findings.

The SPT borings will be performed at the approximate locations shown in the Boring Location Plan included with Tierra's proposal.

Any encountered unsuitable soils will be identified for consideration during the design process. The results of the SPT borings will be summarized in a report of findings and recommendations prepared by Tierra for consideration during the design process and provided to the contractor. The report and AutoCAD software-generated plotted log of each boring profile will be submitted to PBCWUD with the 100% Final Design Submittal. The approximate locations of each bore and the respective bore profiles shall be depicted on a dedicated construction plan sheet of the construction drawings for reference by the contractor.

Tierra's proposal also includes optional supplemental fees to implement any MOT measures necessary for the performance of their work. Additionally, Tierra's proposal includes optional supplemental fees to prepare an MOT plan should it be required in order to perform their work within any applicable R/W.

Deliverables:

A summary of the project documents to be provided as deliverables includes:

- 1. Photos and/or videos of the site visits provided digitally
- 2. Utility location exhibits provided by the utility providers in electronic format
- 3. Meeting summaries from the design review workshops provided digitally
- 4. One (1) 24" x 36" set of the Preliminary design drawings, which will also be provided digitally
- 5. Three (3) 24" x 36" sets and one (1) 11"x17" set of the 60% design plans, which will also be provided digitally
- 6. One (1) digital copy of the 60% OPCC (within one week of 60% design stage submittal)
- 7. Four (4) 24" x 36", two (2) 11"x17" sets of the 90% design plans, which will also be provided digitally
- 8. One (1) digital copy of the 90% OPCC (within one week of 90% design stage submittal)
- 9. Four (4) 24" x 36" and two (2) 11"x17", signed and sealed, sets of the 100% Final design plans with two (2) hard copies of the Final OPCC
- 10. One (1) compact disc (CD) containing copies of all permit applications and correspondence with permitting entities
- 11. "Permit Book" including a hard copy of all acquired permits and a summary of all permits with expiration dates
- 12. Copies of the subsurface utility engineering scanning and soft dig results provided digitally
- 13. One (1) signed and sealed digital copy of the geotechnical engineer's report
- 14. One (1) CD containing all digital final design documents/deliverables, AutoCAD files, portable document format (PDF) files, etc.

ATTACHMENT B

SUMMARY AND STATUS OF CONSULTANT SERVICES AUTHORIZATIONS

Auth. No.	PBCWUD Project No.	Title	Status	Project Total Amount	SBE Total Amount	SBE Participation %	App By	roved Date
1	21-033	Belle Glade Water Main Improvements; SE Zone 4 Water System Replacement	Approved	\$ 571,537.68	\$496,050.00	86.79%	ВСС	04/20/2021
2	21-047	Belle Glade Water Main Improvements; SE Zone 6 Water System Replacement	Approved	\$ 614,111.43	\$537,402.00	87.50%	ВСС	05/04/2021
3	21-041	Critical Facilities and Single Feed Community Improvements Phase 1	Approved	\$ 722,774.22	\$621,536.00	85.99%	ВСС	6/08/2021
4	21-056	South 37 th Street Water Main Replacement	Approved	\$ 64,822.81	\$ 54,193.00	83.60%	CRC	7/07/2021
5	21-084	Lake Worth Hills Water Main Replacement	Pending	\$ 389,811.59	\$ 339,803.50	87.17%	ВСС	Pending

ATTACHMENT C

OEBO SCHEDULE 1

Office of Equal Business Opportunity Compliance Programs

OEBO SCHEDULE 1

LIST OF PROPOSED CONTRACTOR/CONSULTANT AND SUBCONTRACTOR/SUBCONSULTANT PARTICIPATION

SOLICITATION/PROJECT/BID NAME: Lake W	ater Main Replaceme	ent 	SOLICITATION/PROJECT/BID No.: 21-084							
NAME OF PRIME RESPONDENT/BIDDER: Kes						hway, Suite 20	e 201, West Palm Beach, FL 33401 E-MAIL: AMIR@KESHAVARZ.COM			
CONTACT PERSON: Amir J. Keshavarz, P.E.				PHONE N	NO.: 561-689-8600					
SOLICITATION OPENING/SUBMITTAL DATE:	10/25/2021			DEPARTMENT: Palm Beach County Water Utilities Department						
PLEASE LIST THE DOLLAR AMOUNT OF PLEASE ALSO LIST THE DOLLAR AMOUNT PROJECT.	R PERCE	NTAGE OF WO	ORK TO BE (OF WORK T	COMPLETED BY T	HE <u>PRIME CONT</u> D BY ALL SUBCON	RACTOR/C	ONSULTANT ON T S/SUBCONSULTA	THIS PROJECT. NTS ON THE		
	(Che Non-SBE	ck all Applicable Cate	gories) <u>SBE</u>		DOLLAR AMOU	NT OR PERCEN	TAGE OF WORK			
Name, Address and Phone Number		Minority/Women Business	Small Business	Black	Hispanic	Women	Caucasian	Other (Please Specify)		
1. Keshavarz & Associates, Inc. 711 N Dixie Hwy, #201, WPB, FL 33401								\$ 339,803.50		
561-689-8600								Asian		
 InfraMap Corp. 1860 Old Okeechobee Rd, WPB, FL 33409 561-586-0790 	\checkmark						\$ 36,100.09			
3. Tierra South Florida, Inc. 2765 Vista Pkway, #20, WPB, FL 33411	✓							\$ 13,908.00		
561-687-8536		<u></u>			-			Non S/MBE		
4.					-	-				
5.				-		-		-		
(Please use additional sheets if necessary)			Total				\$ 36,100.09	\$ 339,803.50 (Asian) \$13,908.00 (Non S/MBi		
Total Bid Price \$389,811.59			Total SBI	E - M/WBE Participation _	\$339,803.50 / 87.17%	<u> </u>				
I hereby certify that the above information is accurate	to the best o	f my knowledge: 🔟					Mark A. Williams, P.E.,	Senior Vice President		
				Signature			Ti	tle		

Note:

- 1. The amount listed on this form for a Subcontractor/subconsultant must be supported by price or percentage listed on the properly executed Schedule 2 or attached signed proposal.
- 2. Firms may be certified by Palm Beach County as an SBE and/or an M/WBE. If firms are certified as both an SBE and/or M/WBE, please indicate the dollar amount under the appropriate category.
- 3. Modification of this form is not permitted and will be rejected upon submittal.

ATTACHMENT C

OEBO SCHEDULE 2

Office of Equal Business Opportunity Compliance Programs

OEBO LETTER OF INTENT – SCHEDULE 2

A completed Schedule 2 is a binding document between the Prime Contractor/consultant and a Subcontractor/subconsultant (for any tier) and should be treated as such. The Schedule 2 shall contain bolded language indicating that by signing the Schedule 2,

	ties recognize this Schedule as a binding docu actors/subconsultants, must properly execute this doc roposal.				
SOLICITAT	TION/PROJECT NUMBER: WUD 21-084				
SOLICITAT	rion/project NAME: Lake Worth Hills Water M	lain Replac	cement	***	
Prime Co	ntractor: Keshavarz & Associates, Inc.			shavarz & As	ssociates, Inc.
SBE □	ox(s) that apply) ☐ WBE ☐ MBE ☐ M/WBE ☐ Non-S/M/WBE D	ate of Palm B	each County C	ertification (if applic	:able):
The unde	rsigned affirms they are the following (select one from <u>Column 2</u>	each columr	if applicable)	:	Column 3
☑Male □]Asian Amerio]Native Amer		sian American	□Supplier
properly e to be perf	PARTICIPATION – S/M/WBE Primes must document all work xecuted Schedule 2 for any S/M/WBE participation may resurted or items supplied with the dollar amount and/or percons/M/WBE is certified. A detailed proposal may be attached	ılt in that partio entage for each	cipation not bein n work item. S/	ng counted. Specify ir M/WBE credit will onl	detail, the scope of work
Line Item	Item Description	Unit Price	Quantity/ Units	Contingencies/ Allowances	Total Price/Percentag
1	Engineering / Surveying	1			\$ 338,397.00
2	Reimburseable Expenses	1			\$ 1,406.50
		-			
	rsigned Subcontractor/subconsultant is prepared to self-performing total price or percentage: \$ 339,803.50	orm the above-	described work	in conjunction with th	ne aforementioned project
	ersigned intends to subcontract any portion of this work to elow accompanied by a separate properly executed Schedu				
	nfraMap Corp. / Tierra South Florida, Inc.	Price	or Percentage:	\$ 36,100.09 /	/ \$ 13,908.00
	Keshavarz & Associates, Inc.	Ke	shavarz 8	& Associates	, Inc.
	Print Name of Prime	Print	Name of Subco	ntractor/subconsultar	nt
	By:	By:			
	Authorized Signature			authorized Signature	
	Mark A. Williams, P.E. Print Name		k A. Willliam Name	s, P.E.	
	Senior Vice President			President	
	Title ,	Title	4	1	
	Date: 10 28 2021	Date	10/2	8 2021	
				Re	evised 09/17/2019

OEBO LETTER OF INTENT - SCHEDULE 2

A completed Schedule 2 is a binding document between the Prime Contractor/consultant and a Subcontractor/subconsultant (for any tier) and should be treated as such. The Schedule 2 shall contain bolded language indicating that by signing the Schedule 2,

both parties recognize this Schedule as a binding document. All Subcontractors/subconsultants, including any tiered Subcontractors/subconsultants, must properly execute this document. Each properly executed Schedule 2 must be submitted with the bid/proposal. SOLICITATION/PROJECT NUMBER: WUD 21-084 SOLICITATION/PROJECT NAME: Lake Worth Hills Water Main Replacement Prime Contractor: Keshavarz & Associates, Inc. _Subcontractor: InfraMap Corp. (Check box(s) that apply) □SBE □WBE □MBE □M/WBE □Non-S/M/WBE Date of Palm Beach County Certification (if applicable):_ The undersigned affirms they are the following (select one from each column if applicable): Column 1 Column 2 Column 3 ☑Male ☐ Female ☐ African-American/Black ☐ Asian American ☐ Caucasian American **□**Supplier ☐ Hispanic American □Native American S/M/WBE PARTICIPATION - S/M/WBE Primes must document all work to be performed by their own work force on this form. Failure to submit a properly executed Schedule 2 for any S/M/WBE participation may result in that participation not being counted. Specify in detail, the scope of work to be performed or items supplied with the dollar amount and/or percentage for each work item. S/M/WBE credit will only be given for the areas in which the S/M/WBE is certified. A detailed proposal may be attached to a properly executed Schedule 2. Item Description **Unit Price** Quantity/ Line Contingencies/ Total Price/Percentage Units item Allowances Subsurface Utility Engineering \$ 36,100.09 The undersigned Subcontractor/subconsultant is prepared to self-perform the above-described work in conjunction with the aforementioned project at the following total price or percentage: \$ 36,100.09 If the undersigned intends to subcontract any portion of this work to another Subcontractor/subconsultant, please list the business name and the amount below accompanied by a separate properly executed Schedule 2. N/A Price or Percentage: Name of 2nd/3rd tier Subcontractor/subconsultant InfraMap Corp. Keshavarz & Associates, Inc. Print Name of Subcontractor/subconsultant Print Name of Prime By: thorized Signature **Authorized Signature** Mark A. Williams, P.E. Andres Garcia **Print Name Print Name Project Manager** Senior Vice President Title

Date:

Revised 09/17/2019

10-28-2021

Date:



1100 N Florida Mango Rd, Suite D, West Palm Beach, FL 33409 10365 S. Cedar Lane, Glen Allen, VA 23059 804-550-2937 <u>www.inframap.net</u>

March 11, 2021

Palm Beach County Water Utilities Department 8100 Forest Hill Boulevard West Palm Beach, FL 33413

Reference:

WUD 19-082 Utility Distribution & Collection System Engineering Services

To Whom It May Concern:

We are hereby designating Andres Garcia as an authorized signer associated with the contract referenced above and any associated Consultant Service Authorizations and invoices that may fall under this agreement.

Thank you, Dark Sugal

Darlene Siegel

CFO, InfraMap Corp.

Complete Subsurface Utility Engineering and Utility Infrastructure Mapping Since 1987

OEBO LETTER OF INTENT – SCHEDULE 2

A completed Schedule 2 is a binding document between the Prime Contractor/consultant and a Subcontractor/subconsultant (for any tier) and should be treated as such. The Schedule 2 shall contain bolded language indicating that by signing the Schedule 2, both parties recognize this Schedule as a binding document. All Subcontractors/subconsultants, including any tiered

Subcontractors/subconsultants, must properly execute this document. Each properly executed Schedule 2 must be submitted with the bid/proposal. SOLICITATION/PROJECT NUMBER: WUD 21-084 SOLICITATION/PROJECT NAME: Lake Worth Hills Water Main Replacement Prime Contractor: Keshavarz & Associates, Inc. Subcontractor: Tierra South Florida, Inc. (Check box(s) that apply) Date of Palm Beach County Certification (if applicable): N/A□SBE □WBE □MBE ☐M/WBE ☐Non-S/M/WBE The undersigned affirms they are the following (select one from each column if applicable): Column 1 Column 2 Column 3 ☑Male □Female ☐ African-American/Black ☐ Asian American ☐ Caucasian American □ Supplier ☐ Hispanic American ☐Native American S/M/WBE PARTICIPATION - S/M/WBE Primes must document all work to be performed by their own work force on this form. Failure to submit a properly executed Schedule 2 for any S/M/WBE participation may result in that participation not being counted. Specify in detail, the scope of work to be performed or items supplied with the dollar amount and/or percentage for each work item. S/M/WBE credit will only be given for the areas in which the S/M/WBE is certified. A detailed proposal may be attached to a properly executed Schedule 2. **Unit Price** Quantity/ Line Item Description Contingencies/ Total Price/Percentage Units Allowances Item Geotechnical Engineering - Boring and Testing \$ 13,908.00 1 The undersigned Subcontractor/subconsultant is prepared to self-perform the above-described work in conjunction with the aforementioned project at the following total price or percentage: \$ 13,908.00 If the undersigned intends to subcontract any portion of this work to another Subcontractor/subconsultant, please list the business name and the amount below accompanied by a separate properly executed Schedule 2. N/A Price or Percentage: Name of 2nd/3rd tier Subcontractor/subconsultant Tierra South Florida, Inc. Keshavarz & Associates, Inc. Print Name of Prime Print Name of Subcontractor/subconsult **Authorized Signature** Authoriz d'Signature Mark A. Williams, P.E. Rajan Krishnasamy, Print Name Print Name Senior Vice President President Title Title Date: 10/28/2021 Date: 10/28/2021

Revised 09/17/2019

ATTACHMENT D

PROJECT SCHEDULE

The completion dates for this work will be as follows (starting from CONSULTANT'S receipt of Notice-to-Proceed).

Engineering S	<u>Services</u> <u>Comp</u>	oletion Date from Notice to Proceed
Task 1.	Preliminary Design and Consulting Services	s 450 Calendar Days
Task 2.	Infrastructure Surveying and Design Service	es 420 Calendar Days
Task 3.	Permitting Services with Regulatory Agencie Proposed Infrastructure Improvements	es for 400 Calendar Days
Task 4.	Construction Contract Award Assistance	450 Calendar Days
Task 5.	Assistance Towards Public Engagement (With PBCWUD Public Outreach Consultan	450 Calendar Days at)
Task 6.	Permitting and Notification Coordination for Sub-consultant Efforts	400 Calendar Days
₊ Task 7.	Subsurface Utility Engineering (InfraMap Co	orp.) 400 Calendar Days
. Task 8.	Geotechnical Exploration (Tierra South Flor	rida, Inc.) 400 Calendar Days
TOTAL ANT	ICIPATED DURATION	450 CALENDAR DAYS

ATTACHMENT - E BUDGET SUMMARY

Palm Beach County Water Utilities Department

Contract for Consulting/Professional Services Utility Distribution & Collection System Engineering Services

Resolution No. R2020-1898

Contract Dated December 15, 2020

Consultant Service Authorization No.: <u>5</u>
Consultant: <u>Keshavarz & Associates, Inc.</u>

Project Title: Lake Worth Hills Water Main Replacement

PBCWUD Project No.: 21-084

	BUDGET SUMMARY	<u> </u>	<u> </u>		I	İ	<u> </u>	L	<u></u>	<u> </u>	L	L	
	BUDGET SUMMART	т	T	Τ	[T	T	<u></u>	T	T	T	T	
		 	<u> </u>			<u> </u>	Labor Classificati	ion and Hourly Rate		<u> </u>			
Task		Project Director / Principal \$/hr	Senior Project Manager	Sr Project Eng / Si Surveyor \$/hr	Project Eng. / Project Surveyor \$/hr	GIS / Eng CADD Specialist \$/hr	Constr Project Representative \$/hr	Survey Crew \$/hr	Utility / Permit Coord \$/hr	Project / Contract Admin \$/hr	Clerical \$/hr	CONSULTANT Total	Sub Consultant Total
Number	Task Description	\$ 216.00	\$ 210.00	\$ 168.00	\$ 126.00	\$ 114.00	\$ 135,00	\$ 150.00	\$ 90.00	\$ 90,00	\$ 60.00	Services	Services
Task 1.1	Project Management, Research, Data Exchange, Project Orientation and Kick-off	34	50	38	20	0	0	0	0	96	16	\$ 36,348.00	\$ -
Task 1.2	Preliminary Meetings and Coordination with Regulatory Agencies and Right-of- Way Agencies	4	18	2	6	0	0	0	5	0	10	\$ 6,786.00	\$ -
Task 1.3	Field Visit(s) and Coordination with O&M Staff	4	8	4	6	4	4	0	0	0	0	\$ 4,968.00	\$ -
Task 1.4	Utility Coordination	1	8	5	8	10	0	0	18	6	4	\$ 7,284.00	\$ -
Task 1.5	Preliminary Design Stage	6	18	44	34	164	0	0	4	10	6	\$ 37,068.00	\$ -
Task 2,1	Coordination with Subsurface Utility Engineering and Geotechnical Exploration Sub-Consultants for Field Investigations	3	18	6	8	18	0	0	6	6	4	\$ 9,816.00	\$ -
Task 2.2	Field Acquisition of Subsurface Utility Engineering Efforts; Review and Depiction of Results on Construction Plans	4	10	6	14	24	0	52	0	8	4	\$ 17,232.00	
Task 2.3	Route Survey	4	14	20	12	40	0	48	0	4	12	\$ 21,516.00	\$ -
Task 2.4	Topographic Survey	6	16	24	28	90	0	176	0	6	8	\$ 49,896.00	\$ -
Task 2,5	60% Design Stage	8	38	48	38	210	8	0	6	8	12	\$ 49,560.00	\$ -
Task 2.6	90% Design Stage	8	32	34	32	150	6	0	6	6	14	\$ 38,022.00	\$ -
Task 2.7	100% Final Design Stage	4	12	22	16	50	3	0	6	6	7	\$ 16,701.00	\$ -
Task 2.8	Preparation of Engineer's Opinion of Probable Construction Cost(s)	3	10	4	6	16	10	0	0	2	6	\$ 7,890.00	\$ -
Task 3	Permitting Services with Regulatory Agencies for Proposed Infrastructure Improvements	4	19	14	12	32	0	0	40	8	14	\$ 17,526.00	\$ -
Task 4	Construction Contract Award Assistance	4	16	8	10	16	14	0	0	0	4	\$ 10,782,00	\$ -
Task 5	Assistance Towards Public Engagement (With PBCWUD Public Outreach Consultant) (As Needed)	1	6	4	4	6	0	0	0	2	4	\$ 3,756.00	\$ -
Task 6	Permitting and Notification Coordination for Sub-consultant Efforts (As needed)	1	7	2	1	2	0	0	6	1	4	\$ 3,246.00	\$ -
Task 7	Subsurface Utility Engineering (InfraMap Corp. Includes as needed MOT, Permitting, etc.)	0	0	0	0	0	0	0	0	0	0	\$ -	\$ 36,100.09
Task 8	Geotechnical Exploration (Tierra South Florida, Inc. Includes as needed MOT, Permitting, etc.)	0	0	0	0	0	0	0	0	0	0	\$ -	\$ 13,908.00
	Subtotal of Services							·				\$ 338,397.00	\$ 50,008.09
	Labor Subtotal Hours	99	300	285	255	832	45	276	97	169	129		
	Labor Raw Costs	\$ 72.00		\$ 56,00	\$ 42.00	\$ 38.00		\$ 50,00	\$ 30.00	\$ 30,00	\$ 20,00		
	Labor Multiplier	3,00	3,00	3.00	3,00	3,00	3.00	3,00	3,00	3,00	3,00		
	Labor Sub Total	\$ 216.00	7	\$ 168.00	\$ 126,00			\$ 150.00	\$ 90.00	\$ 90.00	\$ 60.00		
	Calculated Sub Total Labor	\$ 21,384.00	\$ 63,000.00	\$ 47,880.00	\$ 32,130,00	\$ 94,848,00	\$ 6,075,00	\$ 41,400.00	\$ 8,730.00	\$ 15,210.00	\$ 7,740,00	\$ 338,397.00	
	Labor Total	\$ 338,397.00											
		\$ 50,008.09											
	Sub-Consultant Multiplier Sub-Consultant Total	\$ 50,008.09											
	Sup-Consultant rotal	• 50,000,09											
	Reimbursable, Mileage, Copies, Prints, Deliveries (As Needed Direct Expenses Per Rates & Projections attached)	\$ 1,406.50											
	Project Total	\$ 389,811.59											

ATTACHMENT - E

Palm Beach County Water Utilities Department

Contract for Consulting/Professional Services Utility Distribution & Collection System Engineering Services

Contract Dated December 15, 2020

Contract Dated December 15, 2020 Resolution No. <u>R2020-1898</u>
Consultant Service Authorization No.: <u>5</u>
Consultant: <u>Keshavarz & Associates, Inc.</u>
Project Title: <u>Lake Worth Hills Water Main Replacement</u>
PBCWUD Project No.: <u>21-084</u>

Reimbursable / Direct Expenses	Rates		
8½" x 11" Prints / Copies (black/white)	\$	0.25	
8½" x 11" Prints / Copies (color)	\$	1.00	
11" x 17" Prints / Copies (black/white)	\$	0.50	
11" x 17" Prints / Copies (color)	\$	1.00	
24" x 36" Prints / Copies (black/white)	\$	1.50	
24" x 36" Prints / Copies (color)	\$	3.50	
Mileage (in accordance with IRS Rates)	\$	0.565	
Bond Copies By Vendor (Billed at Cost - Vendor invoices to be provided when billed)	As Invoic	ed by Vendor	
Deliveries / Courier Service By Vendor (Billed at Cost - Vendor invoices to be provided when billed)	As Invoiced by Vendor		
Title Search By Approved Vendor (Billed at Cost - Vendor invoices to be provided when billed)	As Invoiced by Vendor		

Projected Reimbursable Expenses	Projected Quantity	Unit Cost	Projected Cost	
DIRECT EXPENSES				
1 8½" x 11" Prints / Copies (black/white)	60	\$ 0.25	\$ 15.00	
2 8½" x 11" Prints / Copies (color)	15	\$ 1.00	\$ 15.00	
3 11" x 17" Prints / Copies (black/white)	50	\$ 0.50	\$ 25.00	
4 11" x 17" Prints / Copies (color)	15	\$ 1.00	\$ 15.00	
5 24" x 36" Prints / Copies (black/white)	40	\$ 1.50	\$ 60.00	
6 24" x 36" Prints / Copies (color)	10	\$ 3.50	\$ 35,00	
6 Mileage (in accordance with IRS Rates)	1100	\$ 0.565	\$ 621.50	
7 Bond Copies By Vendor (Billed at Cost - Vendor invoices to be provided when billed)	500	Est. Invoiced Cost	\$420.00	
Beliveries / Courier Service By Vendor (Billed at Cost - Vendor invoices to be provided when billed)	5	Est. Invoiced Cost	\$200.00	
9 Title Search By Approved Vendor (Billed at Cost - Vendor invoices to be provided when billed)	0	Est. Invoiced Cost	\$0.00	
Total Projected As Needed Reimburseable Expense	S		\$1,406.50	



Date:

October 18, 2021

Presented To:

Keshavarz & Associates

711 North Dixie Highway, Suite 201

West Palm Beach, FL 33401

Attention:

Amir Keshavarz, PE E: Amir@keshavarz.com

0:561.689.8600

Project:

CSA#5: WUD 21-084 Lake Worth Hills WM Replacement

SUE Services

Dear Mr. Keshavarz:

We have prepared this proposal to perform subsurface utility engineering services including utility targeting and air vacuum excavation test holes for the above referenced project. We have received the following files attached identifying the project location:

- CSA 5 Lake Worth Hills Project Area 11x17.pdf
- WUD CSA 5 LAKE WORTH HILLS.kmz

Our scope of work shall be performed in accordance with the Procedures, Exclusions and Assumptions identified below and will include the following:

- 1. Utility Targeting: Utility targeting will be performed to identify existing utilities within the project limits.
- 2. Air Vacuum Excavation Test Holes Air vacuum excavation test holes will be performed at the proposed test hole locations once utility targeting and potential utility conflicts have been verified.

Utility Targeting Procedures

- 1. Electronic Sweep/Targeting An electronic sweep of the project site will be conducted. This sweep will verify the location of utilities that were identified during record review and to search for utilities that were not identified during records review. The electronic sweep will be conducted utilizing active and passive type utility detection equipment that detects induced or naturally occurring energy fields present on conductive utilities. Utilities identified will be marked on the ground surface for survey to be performed as wanted by the client.
- 2. Field Drawings/Notes Designators will draft field sheets that show the location, trend and configuration of utilities detected. Field sheets will be prepared and will show underground utility surface features and lines.
- 3. Survey Survey to be performed by others.
- 4. **CADD** CADD to be performed by others.
- 5. Office Review Office review of the existing utility drawing will be performed by InfraMap personnel to compare the utility information to record drawings, field notes and drawings where Quality Levels will be identified. Any additional verification that is required will be noted for personnel conducting the field



review.

- 6. **Field Review** A final field review will be performed by InfraMap personnel, as necessary. This quality assurance function involves verification of the existing utilities depictions. The utility linework and surface feature locations will be checked against field paint and actual surface feature locations. The intent of this task is to check the work of the designators, surveyors, and draftspersons and to ensure all utility locations are within tolerance.
- 7. Deliverables The client will be provided with Field Draft Sheets.

Air Vacuum Excavation Test Holes

During utility locating by air / vacuum test holes InfraMap will complete the following tasks:

- 1. **Agency Coordination** InfraMap will comply with laws and regulations concerning excavation by coordinating with utility inspectors, property owners, "ONE CALL" and others as required.
- 2. **Anticipated Permits** InfraMap will secure and coordinate any permits that may be necessary to perform the work. If permitting fees exceed the amount shown in the fee estimate, the client will be billed for them.
- 3. Coordination with Client Throughout the Test Hole process InfraMap will communicate with the Client with updates on the status of the Test Holes. If utilities are not where the records maps indicate, or a utility is discovered that is not shown on any records and is not detectable during the electronic sweep, InfraMap will contact the client and discuss strategies to address the unpredictable field conditions. InfraMap will work with the client in the identification of additional test holes or removal of test holes from future scope of work.
- 4. Test Hole InfraMap will perform the following for the Test Hole task:
 - a. Field locate the proposed Test Hole based on information provided by the client.
 - b. Excavate a Test Hole using air/vacuum excavation. Provide all measures necessary to perform the work safely and to cause no damage to the utility structure. The Test Hole will be of the minimum size required to expose the utility of interest and record the following information:
 - i. Depth below grade (cover).
 - ii. Utility material, shape, and overall condition.
 - iii. Approximate diameter of pipes, cables, conduits, and the configuration of multiple conduit systems
 - iv. The general directional trend of the utility.
 - v. Thickness, type, and condition of paving material.
 - vi. General soil conditions.
 - c. Install a survey marker directly over the centerline of pipes or edge of concrete structures or conduit banks at grade. Ribbon of appropriate APWA / ULCC color will be installed in the backfill from utility to grade. Indicate on the Test Hole Form the placement of the marker relative to the utility cross section. Record the location of the marker with a minimum of three (3) swing tie measurements to convenient existing permanent structures on site.
 - d. Backfill Test Hole with excavated material in 6" lifts by air pneumatic tamping. Soil placed within one (1) foot of the exposed utility will be clean and tamped carefully. Restore Test Hole area to original condition.
 - e. Repair and restore all pavement cuts to ensure a long-lasting repair utilizing asphalt cold patch.



- 5. Survey Survey to be performed by others.
- 6. **Office Review –** Office review of the test hole reports will be completed to compare the findings of the test hole to the utility information on the records. InfraMap will evaluate any discrepancies with designators, test hole technicians, surveyors, CADD operators and utilities.
- 7. Deliverables Deliverables will include individual Test Hole Forms.

Exclusions and Assumptions:

- 1. The targeting of subsurface utilities, although highly reliable, is expressly understood to represent an approximate location of the target facility as marked on the ground surface. The accuracy of targeting is subject to certain factors beyond our control such as limitations of available technology and field conditions that may include, but are not limited to depth of utility, electrical conductivity of utility, site conditions and access.
- 2. Our electronic equipment cannot locate non-conductive pipe systems and or fiber optic line without tracer wire.
- 3. Concrete Pavement with reinforcement, as well as guide rails and chain link fence, could interfere with our electronic equipment at times to locate utilities.
- 4. Overhead utilities, irrigation systems, residential/commercial services, and confined space entry are not included in this scope of work. In addition, gravity structure investigations including storm water and sanitary sewer are not included.
- 5. At this time, geotechnical borings or subgrade information have not been provided. Large stones, shale, construction debris, or other subsurface conditions including a high groundwater table may limit the ability of our equipment to excavate to the utility and or make it very difficult to visually verify the utility condition and material.
- 6. This proposal assumes test holes will be repaired consistent with the cold patch specifications above. Depending upon test holes locations and/or local, county and state permit requirements, permanent asphalt patch repairs either using hot mix asphalt, asphalt infrared services or cement subbase, are out of the scope of these services. If required, an out-of-scope proposal or supplemental agreement will be prepared before proceeding further.
- 7. This service will be provided with due diligence and in a manner consistent with standards of the subsurface utility mapping industry. Every reasonable effort will be made to locate all systems of interest whether indicated on records available to us or not. However, we do not guarantee that all existing utility systems can or will be detected. It may not be possible to detect utilities that we do not have prior knowledge of, such as systems that are not depicted on records available to us. Further, this service is not intended to detect non-utility structures such as but not limited to foundations, buried tanks, septic systems, wells, tunnels, concrete or metal structures, or the true size and limits of subsurface utility vaults and manholes.
- 8. In order to provide a cost-effective service that causes minimal disturbance to site amenities and utilities, and is acceptable to permitting agencies, the size of the Test Hole excavation is kept to a minimum. The diameter of most pipes greater than 24" cannot be recovered directly from one test hole and it may be necessary to perform additional holes.
- 9. Encased systems and non-encased conduit banks are typically exposed on one edge. This allows the test



hole to be excavated down the side of the utility until a discernable bottom edge can be evaluated. Although it is usually possible to determine the bottom edge of these systems, it is not possible to determine conditions under these or other utility systems, such as concrete over pour and other utilities. It is important for the designer to remember that the bottom edge of an encased system or unencased conduit bank may not represent its lowest point, and that the shape of the system may not be the same on both sides. The width of these systems may not be determined from a single test hole. Encased systems and unencased conduit banks may require two test holes to document the width (and both of the sides top and bottom elevations).

FEE SCHEDULE

UTILITY TARGETING SERVICES					
Resource	<u>Ra</u>	<u>te</u>	Units (Days)		<u>Fee</u>
Targeting Crew	\$ 1,6	92.37	4.5	\$	7,615.67
Direct Expenses	<u>Ra</u>	<u>te</u>	<u>Units</u>		
Mileage (\$/mi.)	\$ (0.560	90	\$	50.40
TARGETING	SERVI	CES F	EE ESTIMATE	\$	7,666.07

UTILITY TEST HOLE SERVICES						
<u>Resource</u>		<u>Rate</u>	<u>Units (Hrs)</u>		<u>Fee</u>	
Test Hole 0'-6'	\$	510.45	50	\$	25,522.50	
Contingent Feet (\$/ft beyond 6' in depth)	\$	112.00	5	\$	560.00	
				1711		
<u>Direct Expenses</u>		<u>Rate</u>	<u>Units</u>			
<u>Direct Expenses</u> Mileage (\$/mi.)	\$	<u>Rate</u> 0.560	<u>Units</u> 252	\$	141.12	
	\$ \$			\$ \$	141.12 2,030.40	
Mileage (\$/mi.)	\$	0.560	252	 		

Our total estimated cost for this project is \$36,100.09. If you have any questions or concerns regarding this proposal, please do not hesitate to call at (561)586-0790 or email lreumann@inframap.net. We look forward to working with Keshavarz & Associates on this project.

Regards,

Lee Reumann Survey Manager

Attachment E



Keshavarz & Associates, Inc. 711 North Dixie Highway, Suite 201 West Palm Beach, Florida 33401

Attn: Mr. Amir J. Keshavarz, P.E.

email: Amir@keshavarz.com

RE: Proposal for Geotechnical Services

Utility Improvements

CSA 5 - Lake Worth Hills Water Replacement Project

Greenacres, Florida

TSF Proposal No.: 2110-754

Dear Amir:

As requested, **TIERRA SOUTH FLORIDA**, **INC.** (**TSF**) is pleased to submit this proposal for the above-referenced project. This proposal includes an outline of our proposed scope of work, an estimate of the total fees, and our anticipated schedule for completion of the work.

PROPOSED SCOPE OF WORK

All work performed by TSF will be in general accordance with PBC and FDOT standards. We understand that utility installation and improvements is anticipated in the locations noted on the attached boring location plan graphic with a summary of limits as noted in Table 1

Table 1 – Project Limits				
Boundary	Description			
North	- Biscayne Drive, residents on both sides of the roadway			
South	- South 38 th Ct, residents on both sides of the roadway			
West	- S 57 th Ave, residents to the east side only			
East	- S 55 th Ave, residents to both sides of the roadway			
• 10,600 I	• 10,600 LF of proposed water main and existing water main replacement			
Water service replacements for approximately 217 properties				

Field services are proposed at the locations noted on the attached Boring Location Plan and summarized in Table 2 below. Required coordination with Palm Beach County or FDOT will be

completed prior to roadway closures or Maintenance of Traffic (MOT) operations within the Right-Of-Way (ROW).

Table 2 – Proposed Field Testing			
Location	Proposed Services		
Utility Areas	Standard Penetration Test (SPT) Borings		
- Eight (8) SPT Borings to 6 feet			
- Eight (8) SPT Boring to 10 feet			
Roadways	Ten (10) asphalt cores		
Note – the total number of borings within the roadway is not known. However, SPTs within			
the roadway will be performed at the location of the 8 asphalt cores.			

Boring locations will be approximately located and noted in the field by our personnel by measuring distances with a tape from known reference points. Elevations at boring locations can be interpreted from topographic plans if furnished by others. Prior to drilling at the project site, TSF will notify the local utility companies through the State's 811 Utility Clearance Service and request that underground utilities be marked. This service will review utilities within the roadway ROW only. Any borings required outside of the ROW will not have utility review by the 811 Service, as the utility companies will not mark privately owned utilities. Our proposal assumes that private property utility lines will be located in the field by others prior to mobilization of the drill rig if borings outside of the ROW are required. TSF will recommend a utility line locating service upon request.

Upon completion of the field exploration, laboratory testing will be performed on selected samples. A geotechnical engineer will evaluate the results of all drilling and laboratory testing. A report will be issued that contains the exploration data, a discussion of the site and subsurface conditions, evaluation, and recommendations of soil parameters for utility installation, and a discussion of some construction considerations.

ESTIMATED FEES

It is proposed that the fee for the performance of the services outlined above is determined on a unit price basis in accordance with the attached Fee Schedule. On the basis of the proposed quantities, it is estimated that the total fee will be as noted below. The total budget amount will be considered a Not To Exceed (NTE), without prior authorization from the Client.

I. SOIL TESTING	\$800.00
II. CONCRETE & MASONRY MATERIALS	\$0.00
III. AGGREGATE TESTING	\$720.00
IV. ASPHALT TESTING	\$1,300.00
V. INSPECTION SERVICES	\$0.00
VI. FIELD EXPLORATIONS / INVESTIGATIONS	\$3,678.00
VII MISCELLANEOUS SERVICE	\$1,200.00
VII ENGINEERING AND PROFESSIONAL SERVICES	\$6,210.00
	\$13,908.00

Our estimate covers the work needed to present our findings in a formal report. Not included are reviews of foundation drawings, preparation of construction specifications, special conferences and any other work requested after submittal of our report.

Boring, sampling, and testing requirements are a function of the subsurface conditions encountered. Therefore, the estimated fee previously indicated is approximate, and compensation for the exploration will be based on the actual work and tests performed. We will endeavor to keep the exploration cost at a minimum consistent with good engineering practice.

SCHEDULE AND AUTHORIZATION

TSF will proceed with the work after receipt of a signed copy of this proposal. With our present schedule, we can commence work within a few days of project approval (weather permitting and utility clearance). The fieldwork is expected to take about one to two days to complete. The written report can be submitted about two weeks after completion of the field exploration, depending on the extent of the laboratory-testing program. Verbal preliminary recommendations can be made to appropriate parties prior to submittal of the written report. The report will include soil profiles, asphalt core data in the form of photos and layer identification estimates, a summary of recommendations for construction, and formal plan sheets for the boring location plan sheet and soil profile sheets to be incorporated into the construction plan set.

We at TSF appreciate the opportunity to submit this proposal and look forward to working with you on this project. If you should have any questions concerning our proposal, please contact our office.

Respectfully submitted,

TIERRA SOUTH FLORIDA, INC.

Harmon C. Bennett, P.E. Principal Engineer

Attachments:

Fee Estimate

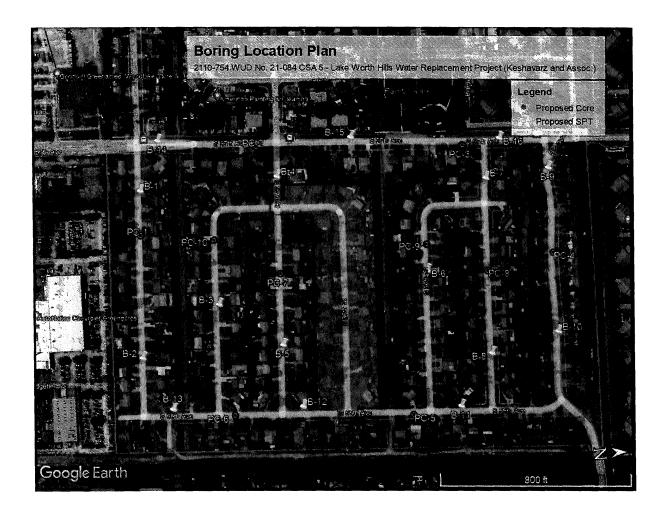
Boring Location Plan

Ramakumar Vedula, P.E. Principal Engineer

A COM MECHANIC	* 1 *4	n .		_
I. SOIL TESTING 1 Field Density Test (five [5] minimum)	Unit test	Rate \$30.00	Quantity	Fees
2 Proctors	test	\$100.00		
3 Florida Bearing Value Test	test	\$45.00		
4 Limerock Bearing Ratio Test	test	\$300.00		
5 Atterberg Limit Test	test	\$80.00	2	\$160.00
6 Carbonate Content Test	test	\$100.00		61 00 00
7 Organic Content Test 8 Corrosion Series	test test	\$50.00 \$190.00	2 2	\$100.00 \$380.00
9 Soil Observation (On Site)	hr.	\$60.00	2	\$300.00
10 Natural Sample Moisture Content	test	\$20.00	8	\$160.00
11 Unit Weight and Moisture Content (Undisturbed Sample)	test	\$50.00		
IL CONCRETE & MASONRY MATERIALS				
Concrete Compression test (Min four [4] cylinders per trip) -Prepare cylinders & slump test on site, and deliver to lab	set	\$150.00		
2 Additional Concrete cylinders	cyl	\$18.00		
3 Concrete Compression test only [delivered to lab]	cyL	\$18.00		
4 Slump test	ea.	\$18.00		
5 Air Content Test	ea.	\$25.00		
6 Stand-by	hr.	\$65.00		
7 Grout Prism (Six [6] per set) - Includes preparation of Prism on site	set	\$80.00		
8 2" x 2" Mortar Cubes (Six [6] per set)	301	\$60,00		
- Includes preparation of Cubes on site	set	\$80,00		
9 Additional Mortar cubes	ea.	\$18.00		
10 Masonry Units				
A. Compressive Strength	unit	\$80.00		
B. Absorption	unit	\$50.00		
11 Concrete Cores (Min 3);		680.00		
A. Secure, trim & test B. Testing of core [delivered to lab (Incl Trim)]	core	\$80,00 \$50.00		
12 Swiss Hammer Testing.	hr.	\$65.00		
13 Windsor Probe Test (Min. 3 shots)	test	\$150.00		
14 Additional Windsor Probe Tests	test	\$100.00		
III. AGGREGATE TESTING				
1 Grain size determination:		677 00	,	#450.00
A. Full grain size (8 sieves) B. Wash through (#200)	test test	\$75.00 \$45.00	6 6	\$450.00
2 Sieve Analysis – Course Aggregate	test	\$45.00 \$45.00	U	\$270.00
3 Specific Gravity & Absorption of Fine or Coarse Aggregate	test	\$70.00		
. ,				
IV. ASPHALT TESTING				
1 Asphalt Cores (obtaining core samples)	ea.*	\$130.00	10	\$1,300.00
2 Asphalt Extraction & Gradation	ea.	\$150.00		
3 Asphalt Density and Thickness4 Marshall Stability (Incl density, flow and stability of 3 specimens)	ea.	\$25.00		
(50 blows)	ea.	\$150.00		
5 Coring Machine plus Generator Rental	trip	\$400.00		
6 Superpave Resolution Testing	•			
 A. Gyratory Compaction, bulk specific gravity 	ea.	\$175.00		
B. Rice Testing	ea.	\$120.00		
V. INSPECTION SERVICES				
1 Concrete Inspection (on job-site or plant)	hr.	\$65.00		
2 Pile Driving Inspection	hr.	\$70.00		
3 Pre-Stress Yard Inspection	hr.	\$70.00		
4 Steel Inspection	hr.	\$70.00		
5 Threshold Inspection	hr.	\$70.00		
6 Asphalt Inspection (Plant or Roadway)	hr.	\$85.00		
7 Helical Pile Inspection	hr.	\$70.00		
8 Drilled Shaft Logging / Inspection Services	hr.	\$70.00		
VI. FIELD EXPLORATIONS / INVESTIGATIONS				
1 Auger Borings	ft.	\$10.00		
2 Hand Augers	hr.**	\$130,00		
3 Standard Penetration Test Borings - Truck Rig				
A. 0' – 50'	ft.	\$13.00	128	\$1,664.00
B. 1' – 100'. 4 Grout-Seal Boreholes	ft.	\$15.00		
A. 0' – 50'	ft.	\$6.00	128	\$768.00
B. 1' – 100'.	ft.	\$7.00	120	-, 50.00
5 Casing Allowance	ft.	\$7.00		
A. 0' – 50'	ft.	\$7.00	128	\$896.00
B. 1' – 100'.	ft.	\$9.00		
6 Muck Probing (4 hr min) (2-man crew)	hr.**	\$130.00		
7 Mobilization of drilling equipment to project (Min Charge)		0250.00	•	#1#A **
A. 50-mile travel B. 100-mile travel	ea.	\$350.00 \$450.00	1	\$350.00
D. 100-lime gaver	ea.	00.UC+•¢		

VII. MISCELLANEOUS SERVICE				
1 Foundation Analysis and Recommendation				
2 Percolation Test	test	\$300.00		
3 Install Monitoring Well, 25' Depth (per PBCWUD Standards & Details)	LF	\$50.00		
4 Plug & Abandon Monitoring Well, 25' depth	hour	\$150.00		
5 Maintenance of Traffic	Day	\$1,200.00	1	\$1,200.00
VIII. ENGINEERING AND PROFESSIONAL SERVICES				
1 Principal Engineer/PM, PE	hour	\$185.00	2	\$370.00
2 Senior Geotechnical Engineer, PE	hour	\$175.00	4	\$700.00
3 Project Engineer	hour	\$145.00	8	\$1,160.00
4 Staff Engineer	hour	\$110.00	12	\$1,320.00
5 Senior Engineering Technician	hour	\$110.00	10	\$1,100.00
6 Engineering Technician	hour	\$65.00	16	\$1,040.00
7 Drafter/CADD	hour	\$65.00	8	\$520.00
				\$13,908.00

^{*/ **2} technicians @ \$65/hr involves access, carrying equipment, setup & etc



ATTACHMENT F

Palm Beach County Water Utilities Department

Contract for Consulting/Professional Services
Utility Distribution & Collection System Engineering Services

Resolution No. R2020-1898 Contract Dated December 15, 2020

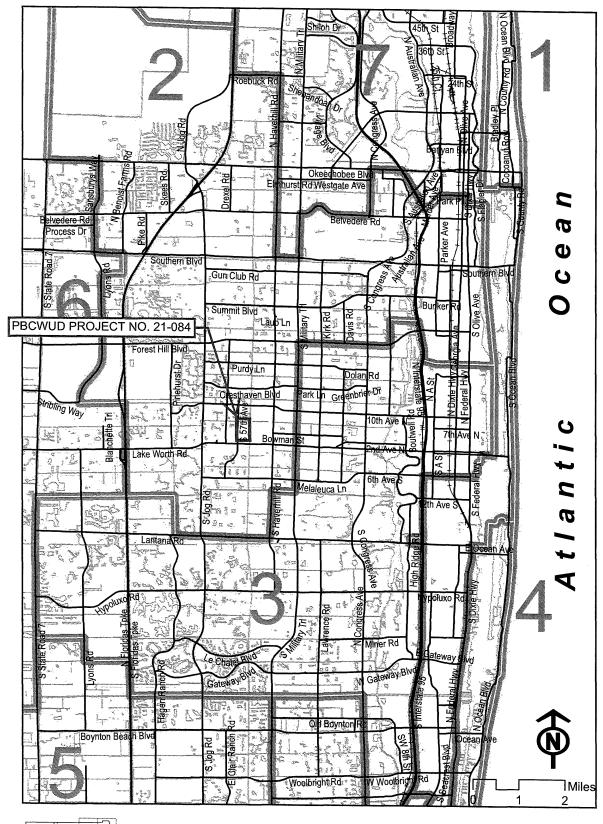
SUMMARY OF SBE-M/WBE BUSINESS TRACKING

Master Contract Goals	SBE: 85%	M/WBE: 85%	MBE (Asian): 82%	MBE (Black): 3%
Current Proposal				
Value of Authorization No. 5	\$389,811.59			
Value of SBE-M/WBE Letters of Intent	\$339,803.50	\$ 339,803.50	\$ 339,803.50	\$0.00
Actual Percentage	87.17%	87.17%	87.17%	0.00%
Signed/Approved Authorizations				
Total Value of Authorizations	\$1,973,246.14			
Total Value of SBE-M/WBE Signed	\$1,709,181.00	\$1,709,181.00	\$1,709,181.00	\$0.00
Subcontractors				
Actual Percentage	86.61%	86.61%	86.61 %	0.00%
Signed/Approved Authorizations Plus				
Current Proposal				
Total Value of Authorization	\$2,363,057.73			
Total Value of Subcontractors & Letters	\$2,048,984.50	\$2,048,984.50	\$2,048,984.50	\$0.00
of Intent				
Actual Percentage	86.70%	86.70%	86.70%	0.00%

ATTACHMENT G

LOCATION MAP

PBCWUD NO. 21-084

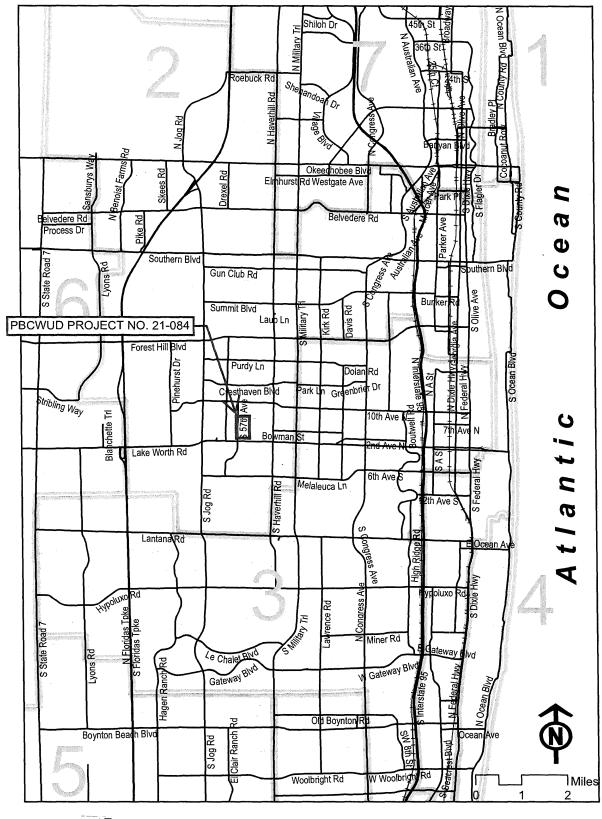




ATTACHMENT 2

LOCATION MAP

PBCWUD NO. 21-084





ATTACHMENT 3

KESH&AS-01

SHOCKLEYK

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 6/28/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s) PRODUCER License # 0E67768 CONTACT Ale Castaneda Insurance Office of America Abacoa Town Center 1200 University Blvd, Suite 200 Jupiter, FL 33458 PHONE (A/C, No, Ext): (561) 721-3755 FAX (A/C, No): E-MAIL ADDRESS: Ale.Castaneda@ioausa.com INSURER(S) AFFORDING COVERAGE INSURER A: Travelers Indemnity Company 25658 INSURED INSURER B: Travelers Indemnity Company of America 25666 INSURER C: Travelers Property Casualty Company of America 25674 Keshavarz & Associates, Inc. 711 N. Dixie Hwy Suite 201 West Palm Beach, FL 33401 **INSURER D: Travelers Casualty & Surety Company** 19038 INSURER E : QBE Insurance Corporation 39217 INSURER F : CERTIFICATE NUMBER: **COVERAGES** REVISION NUMBER: THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. ADDL SUBR INSD WVD POLICY EFF POLICY EXP (MM/DD/YYYY) TYPE OF INSURANCE POLICY NUMBER LIMITS X COMMERCIAL GENERAL LIABILITY 1.000.000 EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurre CLAIMS-MADE X OCCUR 1,000,000 660-6J917378-TIL-21 7/1/2021 7/1/2022 5.000 MED EXP (Any one person) 1,000,000 PERSONAL & ADV INJURY 2,000,000 GEN'L AGGREGATE LIMIT APPLIES PER: GENERAL AGGREGATE 2,000,000 POLICY X PRO-PRODUCTS - COMP/OP AGO EMPLOYEE BENEFI LOC 2,000,000 OTHER: \$ COMBINED SINGLE LIMIT (Ea accident) В 1.000.000 AUTOMOBILE LIABILITY \$ X ANY AUTO BA-9P991512-21 7/1/2021 7/1/2022 BODILY INJURY (Per person) \$ OWNED AUTOS ONLY SCHEDULED AUTOS BODILY INJURY (Per acc PROPERTY DAMAGE (Per accident) \$ HIRED AUTOS ONLY NON-OWNED AUTOS ONLY \$ 1,000,000 Х X OCCUR UMBRELLA LIAB EACH OCCURRENCE \$ CUP-4688T918-21 7/1/2021 7/1/2022 1,000,000 CLAIMS-MADE **EXCESS LIAB** AGGREGATE \$ 10,000 DED X RETENTION\$ D X PER STATUTE WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) UB-7K077863-21 7/1/2021 7/1/2022 1.000.000 X E.L. EACH ACCIDENT 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ yes, describe under ESCRIPTION OF OPERATIONS below 1,000,000 E.L. DISEASE - POLICY LIMIT \$
Per Claim Professional Liabili ANF4306102 7/1/2021 7/1/2022 3,000,000 Professional Liabili ANE4306102 7/1/2021 7/1/2022 3,000,000 Aggregate DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Contract for Consulting/Professional Services Utility Distribution and Collection System Engineering Services Project No. WUD 19-082
Palm Beach County Board of County Commissioners, a political Subdivision of the State of Florida, its officers, employees and agents are Additional Insured with respect to General Liability when required by written contract per form# CG D3 81 09 15 on a Primary Non-Contributory basis and is Additional Insured with respect to Auto Liability per form# CAF219 08/17& is primary and non-contributory when required by written contract per form# CA0001 03/10. Waiver of Subrogation applies with respect to General Liability per form# CGD379 02/19, with respect Automobile Liability per form# CAF219 08/17, and with respect to Workers' Compensation when required by written contract per form # WC000313 (00). CANCELLATION CERTIFICATE HOLDER SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. **Palm Beach County** Water Utilities Dept AUTHORIZED REPRESENTATIVE Director Utilities Engineering 8100 Forest Hill Blvd

West Palm Beach, FL 33413 ACORD 25 (2016/03)

ACORD

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